

Software Product Description

PRODUCT NAME: FMS-11/RSX, Version 1.0
Forms Management System

SPD 12.27.07

DESCRIPTION

FMS-11/RSX is a forms-oriented, video I/O management system for the RSX-11M, RSX-11M-PLUS, and RSX-11S Real-Time Operating Systems. FMS-11/RSX functions as an independent, software front end that logically off-loads the complexities of interactive video I/O management from the application program.

Call statement, high-level language interfaces are provided for applications written in FORTRAN IV/IAS-RSX, FORTRAN 77/RSX, BASIC-PLUS-2 for RSX-11M and COBOL, as well as MACRO-11 assembly language. FMS-11/RSX is equally effective for implementing applications with question and answer, menu, or fill-in-the-blank type forms.

Forms defined using FMS-11/RSX can use the following features of DIGITAL's VT100 terminal:

- Reverse video characters
- Bold characters
- Underlined characters
- Blinking characters
- 132-column lines
- Jump and smooth scrolling
- Split screen and reverse screen

FMS-11/RSX can be used as a general-purpose manager of operator I/O or as a front end in traditional source data entry applications. Possible FMS-11/RSX applications range from data base inquiry/response/update to uses such as periodically displaying the status of a real-time process or accepting control information from the operator for the process.

FMS-11/RSX application programs can be developed and executed under the RSX-11M or RSX-11M-PLUS Operating Systems. They may be coded in MACRO-11 or one of the following high-level languages:

- FORTRAN IV/IAS-RSX
- FORTRAN 77/RSX
- BASIC-PLUS-2
- COBOL-81/RSX
- PDP-11 COBOL

FMS-11/RSX applications can be executed under the RSX-11S Operating System, provided that all required forms are linked with each application as a memory-resident form library.

FMS-11/RSX forms are data structures created using FED, the interactive form editor. Forms normally reside in form library files on disk and are retrieved as needed by application programs at execution time. This results in a high degree of independence between form definitions and application programs. In many cases form definitions can be modified without requiring recompilation or relinking of the application program.

In the case where extra fast response time is required or in an RSX-11S environment with no mass storage support, forms can be linked to applications as a memory-resident form library.

Each data field in FMS-11 forms can be assigned attributes such as validation "picture," embedded text characters, right/left justification, fixed decimal, and "must complete." A default value and a line of explanatory HELP text can be associated with each field of a form. In addition, a separate HELP display can be associated at the form level. Another feature of FMS-11/RSX is "named data." This allows application parameters to be stored and edited with the form as named strings of constant data and retrieved dynamically by name or number during program execution.

FMS-11/RSX consists of the following software components:

FED (Form Editor)—Used by the application developer to create and modify video forms by typing them on the screen as they are to appear to the application user. In addition, a variety of editing functions may be invoked using the VT100 function keypad. All form attributes, individual field attributes, and named data constants are assigned in this form editing process. The result of a FED session is an intermediate form file, ready for processing by the Form Library Utility.

FUT (Form Library Utility)—Multifunction utility program for manipulating files of FMS-11/RSX form descriptions. FUT provides a full range of form library management functions, such as merge, insert, update, extract, and delete a form. It can be used to print a complete description of one

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or more forms from a form file or library or to list the names of all forms in a form library. FUT can produce an object module of forms to be linked with the application when memory-resident forms are desired. Finally, FUT can write out COBOL Data Division code for a form definition, which can then be copied into COBOL programs.

FDV (Form Driver)—Reentrant subroutine called from application programs to control screen processing. The FDV manages all screen input and output, display forms, manipulates the screen, performs basic input validation, and responds to the operator's requests for HELP. Applications may interact with the operator one field at a time or on a whole record basis using the form description generated by FED during the form editing process.

All references to fields in a form are by name, so that application programs are not dependent on the physical layout of the form. Furthermore, FDV performs its editing, data preparation, and HELP functions without the knowledge or intervention of the application program. Separate subroutine libraries must be generated for VT52 and VT100 support.

KED (Video Keypad Editor)—General purpose text editor that operates on standard ASCII files. KED uses the function keypad to control the full spectrum of video features of the VT100. A VT52 version (K52) is provided. Most editing operations are implemented as only one or two keystrokes on the function keypad.

When editing a main file, the user can copy material from an auxiliary input file or write material to an auxiliary output file. KED assists in the preparation of source programs by allowing the user to edit files through a full screen, bidirectional scrolled "window" into the file. In addition to the standard character, word, and line operations, KED provides flexible search, replace, cut, paste, and repeat functions.

SOURCE CODE INFORMATION

Source code for the Form Driver is provided on all available distribution media for this product.

This source code is provided on an "AS IS" basis without any warranty of any kind either express or implied.

MINIMUM HARDWARE REQUIRED

For Application Execution

The Form Driver requires from 6K to 9K bytes of main memory, depending on the options selected when the Form Driver is generated. An additional 1K bytes is required for interface code if the Form Driver is called from any high-level language.

Terminal	Form Development	Application Execution
VT52	N	Y
VT100	Y	Y
VT100 with AVO	Y	Y
VT101	Y	Y
VT102	Y	Y
VT125	Y	Y

Key: Y = Fully Supported
 N = Not Supported
 AVO = Advanced Video Option

For Application Development

The Form Editor requires 36K bytes and one of the terminals listed above.

The Form Utility requires 16K bytes. It does not require a VT100 terminal.

For KED

Any valid RSX-11M or RSX-11M PLUS system capable of supporting the full-duplex terminal driver with a VT52 or VT100 for each operator using KED. KED requires 30K bytes of memory.

PREREQUISITE SOFTWARE

One of the following:

For Application Execution

RSX-11M Operating System*
 RSX-11M-PLUS Operating System*
 RSX-11S Operating System, Version 4.0

For Application Development

RSX-11M Operating System*
 RSX-11M PLUS Operating System*

NOTE: FMS-11/RSX application programs must be developed using MACRO-11 (which is included in the prerequisite operating systems) or one of the higher level languages listed in the Optional Software sections. FMS-11/RSX requires that the operating system be generated with the full-duplex terminal driver which requires memory management hardware. Execution of the Form Utility (FUT) in a multitask environment requires that checkpointing to a system file be enabled.

* Refer to the RSX-11M or RSX-11M PLUS Optional Software Cross Reference Table (20 98 ** or 20 99 **) for the required version.

OPTIONAL SOFTWARE

BASIC-PLUS-2 for RSX-11M and RSX-11M-PLUS
 COBOL-81/RSX
 FORTRAN IV/IAS-RSX
 FORTRAN 77/RSX
 PDP-11 COBOL

SOFTWARE WARRANTY

Warranty for this software product is provided by DIGITAL with the purchase of a license for the product. There is no additional charge. This software product is warranted to conform to the Software Product Description (SPD). This means that DIGITAL will remedy any nonconformance when it is reported to DIGITAL by the customer during the warranty period.

The warranty period is ninety (90) days. It begins when the software is installed or thirty (30) days after delivery to the end user, whichever occurs first and expires ninety (90) days later or one hundred eighty (180) days after release of a subsequent version of the software.

Warranty Service

DIGITAL provides software warranty service worldwide. Service is provided in the country of purchase and is not transferable between countries.

DIGITAL will provide a service location which will accept reporting (in a format prescribed by DIGITAL) of a nonconformance problem caused when using the licensed software under normal conditions as defined by the SPD. DIGITAL will respond to a nonconformance problem in the current unaltered release of the licensed software by issuing correction information such as correction documentation, corrected code, or notice of availability of corrected code, or a restriction or a bypass. The customer will be responsible for the preparation and submission of the problem report to the service location.

Warranty Exclusion

DIGITAL DOES NOT WARRANT THAT THE SOFTWARE LICENSED TO CUSTOMER SHALL BE ERROR FREE, THAT THE SOFTWARE SHALL OPERATE WITH ANY HARDWARE AND SOFTWARE OTHER THAN AS SPECIFIED IN THIS SPD, THAT THE SOFTWARE SHALL SATISFY CUSTOMER'S OWN SPECIFIC REQUIREMENTS, OR THAT COPIES OF THE SOFTWARE OTHER THAN THOSE PROVIDED OR AUTHORIZED BY DIGITAL SHALL CONFORM TO THE SPD.

DIGITAL MAKES NO WARRANTIES WITH RESPECT TO THE FITNESS AND OPERABILITY OF MODIFICATIONS NOT MADE BY DIGITAL.

IF THE SOFTWARE FAILS TO FUNCTION FOR REASONS STATED ABOVE, THE CUSTOMER'S WARRANTY WILL BE INVALIDATED AND ALL SERVICE CALLS WILL BE BILLABLE AT THE PREVAILING PER CALL RATES.

INSTALLATION

This software product can be installed by the customer using the step-by-step documentation available for this product. Optionally you can purchase DIGITAL Installation Services which provide for the installation of the software product by an experienced DIGITAL Software Specialist.

DIGITAL's Installation Services can be purchased as a separate service.

ORDERING INFORMATION

DIGITAL provides a wide range of material and service options supporting this software product. Each option is described below. If you are already familiar with these options you may obtain the ordering information directly from the Software Options Chart. In most cases you will want to review the following descriptions to determine what options you require.

You will need a separate license for each CPU on which you will be using the software product (except as otherwise specified by DIGITAL). Then you will select the materials and service options you need to utilize the product effectively.

You order the license, materials and services using order numbers of the form Qxxxx-X? "Qxxxx" refers to the specific software product, "X" is the license code or material service option and "?" is the selectable media code for machine readable materials.

Single-Use licensed software is furnished under the licensing provisions of DIGITAL's Standard Terms and Conditions of Sale, which provide in part that the software and any part thereof may be used on only the single CPU on which the software is first installed, and may be copied in whole or in part (with the proper inclusion of DIGITAL's copyright notice and any proprietary notices on the software) for use on such CPU.

LICENSE OPTIONS

Single-Use License Option

The Single-Use License is your right to use the software product on a single CPU and it includes your 90 day warranty.

For your first installation of this software product you must purchase as a minimum:

- Single-Use License Option, and
- Distribution and Documentation Option

The license gives you the right to use the software on a single CPU and the Distribution and Documentation Option provides the machine readable software and related documentation.

To use this software product on additional CPU's you must purchase as a minimum:

- Single-Use License Option

In addition to the right to use, the license gives you the right to copy the software from your original CPU installation to the additional CPU. Therefore, the Distribution and Documentation Option is not required, but optional.

Single-Use License Option for Forms Driver and KED

If you have FMS-11/RSX installed on a CPU fully licensed for that product and you wish to use the Forms Driver and KED portion of it on an additional CPU, you can purchase a Single Use License for Forms Driver and KED.

This license gives you the right to use only the Forms Driver and KED and does not include software warranty.

MATERIALS AND SERVICE OPTIONS

Distribution and Documentation Option

The Distribution and Documentation Option provides the software object code in binary form and the basic documentation. You must have, or order, a Single-Use License to obtain this option. You will need this option to install the software for the first time. You will also need this option to obtain revised versions of the software product when they become available.

If you prefer to receive automatic distribution of revised versions for this product, you must purchase a Software Product Service Agreement.

Software Revision Right-To-Copy Option

The Right-To-Copy option allows a customer with multiple CPU's to copy a revised version of a software product from one CPU to another. Each CPU must be licensed for that product. You first install the revised software on one CPU, then you can make copies for additional CPU's by purchasing the Right-To-Copy option for each additional CPU.

If you prefer to automatically obtain the right-to-copy, you must purchase a Service Right-to-Copy for each additional CPU; this is a service added to a Software Product Service Agreement.

Documentation-Only Option

You can obtain one copy of the basic documentation by purchasing the Documentation Only option.

Installation Service Option

Installation Service includes those services provided by a DIGITAL Software Specialist to successfully install a software product. Digital's Installation Service accelerates your productive use of this product. (If Operating System parameters must be changed, system regeneration may not be included in the Installation Service.)

Software Product Service Agreements

DIGITAL offers you a choice of three Software Product Service Agreements to support your software. These agreements provide a set of the following services depending on the agreement selected: remedial and maintenance service, revised versions of the software and documentation, telephone support and newsletters or dispatches containing suggested fixes for known problems.

The level of service you need depends primarily on three factors: (1) your available manpower, (2) your staff's level of expertise, and (3) the importance to you of having your system current and operating at peak efficiency. Our DIGITAL representative can help you select the service best suited to your needs. The agreement types are listed below.

DECsupport Service is designed for people requiring high availability of their system and for customers who need regular access to DIGITAL's technical expertise. It is the most comprehensive support service, offering on-site preventative maintenance and remedial support for critical problems. In addition, it also provides revised versions of the software and documentation, fast response telephone support and newsletters or dispatches.

BASIC Service is ideal for customers who have their own technical staff but need fast answers to operational questions. The telephone support provided in this service gives you timely answers and solves most software problems. In addition, you get revised versions of the software and documentation, and newsletters or dispatches.

Self-Maintenance Service is designed for customers who require only minimal support but wish to receive revised versions of the software and documentation information from DIGITAL. In addition, the service provides newsletters or dispatches.

All agreements are available to licensed DIGITAL customers on an annual, contractual basis.

The Prerequisite Software, as specified by this SPD, must have the equivalent level Software Product Service.

A variety of service options may be added to an existing Software Product Service Agreement as follows:

- Customers who want to copy the revised software received under their Software Product Service Agreement onto additional CPUs running that same product may order a Service Right-to-Copy for each CPU, Qxxxx-3Z.

Training from Educational Services

To ensure customer success with DIGITAL products, Educational Services sells training for the installation, maintenance and/or management of DIGITAL software. Course formats vary from seminars to packaged training materials that include self-paced instruction and computer-based instruction to traditional lecture/labs offered at DIGITAL's 27 worldwide training centers.

All course schedules, availability and purchasing information is listed in the Educational Services DIGEST, a quarterly publication designed to assist customers in planning their training programs.

Professional Software Services

DIGITAL Software Specialists are available on a per call or resident contract basis to help in all phases of software development or implementation. Specialists are available to serve as technical consultants, decision support consultants or business systems analysts. Resources are available to:

- Supplement your programming staff
- Assume project management responsibility
- Develop software
- Assure successful start up and performance with product specific packaged services

Contact your DIGITAL representative for additional information and ordering details.

SOURCE MATERIALS OPTIONS

You can obtain optional source materials for this software product by signing DIGITAL's Software Program Sources License Agreement and then purchasing the source option(s) you want. The agreement entitles you to use the source materials at one customer facility or location which is specified in the agreement.

Most users do not require source materials. They are used primarily to make modifications to the software product. Source kits provided by DIGITAL do not necessarily contain all source files used by DIGITAL to build binary kits.

Source License and Sources Distribution Option

This option provides you with the machine readable source code for this software product. It gives you the right to use the source code on any CPU at the facility/location specified in the agreement which has a Single Use License for the object code.

Sources Distribution Option

This option provides you with the revised version of the machine readable source code for this software product.

Chart

The distribution Media Codes used in the Software Options Chart are described below. You specify the desired Media Code at the end of the Order Number, e.g., QJ715-HD = binaries on 9-track 800 BPI Magtape (NRZI)

D = 9-track 800 BPI Magtape (NRZI)
E = RK05 Disk Cartridge
H = RL02 Disk Cartridge
M = 9-track 1600 BPI Magtape (PE)
Q = RL01 Disk Cartridge

T = RK06 Disk Cartridge
V = RK07 Disk Cartridge
Z = No hardware dependency

SOFTWARE OPTIONS CHART

NOTE: The availability of these software product options and services may vary by country. Customers should contact their local DIGITAL office for information on availability.

OPTIONS	ORDER NUMBER Q-BUS ¹	ORDER NUMBER UNIBUS ²
LICENSE OPTIONS: A LICENSE IS REQUIRED FOR EACH CPU		
Single-Use License		QJ715 U7
Single-Use License for Forms Drivers and KED	QY717 DZ	QJ717 DZ
MATERIALS AND SERVICE OPTIONS:		
Supplementary Software Option for KED		QJ715 TD QJ715 TE QJ715 TM QJ715 TQ QJ715 TT QJ715 TV
Distribution and Documentation Option		QJ715 HD QJ715 HE QJ715 HM QJ715 HQ QJ715 HT QJ715 HV
Software Revision Right To-Copy Option		QJ715 HZ
Software Revision Right To-Copy Option for Forms Drivers and KED	QY717 HZ	QJ717 HZ
Documentation Only Option		QJ715 GZ
Installation Service Option		QJ715 ID QJ715 IE QJ715 IM QJ715 IQ QJ715 IT QJ715 IV

SOFTWARE OPTIONS CHART (Continued)

OPTIONS	ORDER NUMBER Q-BUS ¹	ORDER NUMBER UNIBUS ²
SOFTWARE PRODUCT SERVICE AGREEMENTS:		
DECsupport Service		QJ715 9D QJ715 9E QJ715 9H QJ715 9M QJ715 9Q QJ715 9T QJ715 9V
Basic Service		QJ715 8D QJ715 8E QJ715 8H QJ715 8M QJ715 8Q QJ715 8T QJ715 8V
Self-Maintenance Service		QJ715 3D QJ715 3E QJ715 3H QJ715 3M QJ715 3Q QJ715 3T QJ715 3V
SOURCE CODE AND MATERIALS OPTIONS:		
Source License and Sources Distribution		QJ715 EE
Sources Distribution		QJ715 NC

¹ A Microprocessor (Q bus) includes all LSI bus systems, boards and chip sets (11/23 PLUS, MICRO, PDP-11, MICRO/J11, MICRO/F11, and MICRO/T11).

² A UNIBUS includes all PDP-11 systems having a UNIBUS (examples: PDP-11/24, PDP-11/34, PDP-11/44, PDP-11/54, PDP-11/70).

Software Product Description

PRODUCT NAME: FMS-11/RSX, Version 1.0
Forms Management System

SPD 12.27.5

DESCRIPTION:

FMS-11/RSX is a forms-oriented, video I/O management system for the RSX-11M, RSX-11M-PLUS, and RSX-11S Real-Time Operating Systems. FMS-11/RSX functions as an independent, software front end that logically off-loads the complexities of interactive video I/O management from the application program.

Call statement, high-level language interfaces are provided for applications written in FORTRAN IV/IAS-RSX, FORTRAN 77/RSX, BASIC-PLUS-2 for RSX-11M and COBOL, as well as MACRO-11 assembly languages. FMS-11/RSX is equally effective implementing applications with question and answer, menu, or fill-in-the-blank type forms.

Forms defined using FMS-11/RSX can use the following features of DIGITAL's VT100 terminal:

- Reverse video characters
- Fixed characters
- Underlined characters
- Blinking characters
- 132-column lines
- Jump and smooth scrolling
- Split screen and reverse screen

FMS-11/RSX can be used as a general-purpose manager of operator I/O or as a front end in traditional source data entry applications. Possible FMS-11/RSX applications range from data base inquiry/response/update to uses such as periodically displaying the status of a real-time process or accepting control information from the operator for the process.

FMS-11/RSX application programs can be developed and executed under the RSX-11M or RSX-11M-PLUS Operating Systems. They may be coded in MACRO-11 or one of the following high-level languages:

- FORTRAN IV/IAS-RSX
- FORTRAN 77/RSX

- BASIC-PLUS-2
- COBOL-81/RSX
- PDP-11 COBOL

FMS-11/RSX applications can be executed under the RSX-11S Operating System, provided that all required forms are linked with each application as a memory-resident form library.

FMS-11/RSX forms are data structures created using FED, the interactive form editor. Forms normally reside in form library files on disk and are retrieved as needed by application programs at execution time. This results in a high degree of independence between form definitions and application programs. In many cases form definitions can be modified without requiring recompilation or relinking of the application program.

In the case where extra fast response time is required or in an RSX-11S environment with no mass storage support, forms can be linked to applications as a memory-resident form library.

Each data field in FMS-11 forms can be assigned attributes such as validation "picture," embedded text characters, right/left justification, fixed decimal, and "must complete." A default value and a line of explanatory HELP text can be associated with each field of a form. In addition, a separate HELP display can be associated at the form level. Another feature of FMS-11/RSX is "named data." This allows application parameters to be stored and edited with the form as named strings of constant data and retrieved dynamically by name or number during program execution.

FMS-11/RSX consists of the following software components:

FED (Form Editor) — Used by the application developer to create and modify video forms by typing them on the screen as they are to appear to the application user. In addition, a variety of editing functions may be invoked using the VT100 function keypad. All form attributes, individual field attributes, and named data constants are assigned in this form editing process. The result of a FED session is an intermediate form file, ready for processing by the Form Library Utility.

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FUT (Form Library Utility) — Multifunction utility program for manipulating files of FMS-11/RSX form descriptions. FUT provides a full range of form library management functions, such as merge, insert, update, extract, and delete a form. It can be used to print a complete description of one or more forms from a form file or library or to list the names of all forms in a form library. FUT can produce an object module of forms to be linked with the application when memory-resident forms are desired. Finally, FUT can write out COBOL Data Division code for a form definition, which can then be copied into COBOL programs.

FDV (Form Driver) — Reentrant subroutine called from application programs to control screen processing. The FDV manages all screen input and output, display forms, manipulates the screen, performs basic input validation, and responds to the operator's requests for HELP. Applications may interact with the operator one field at a time or on a whole record basis using the form description generated by FED during the form editing process.

All references to fields in a form are by name, so that application programs are not dependent on the physical layout of the form. Furthermore, FDV performs its editing, data preparation, and HELP functions without the knowledge or intervention of the application program. Separate subroutine libraries must be generated for VT52 and VT100 support.

KED (Video Keypad Editor) — General purpose text editor that operates on standard ASCII files. KED uses the function keypad to control the full spectrum of video features of the VT100. A VT52 version (K52) is provided. Most editing operations are implemented as only one or two keystrokes on the function keypad.

When editing a main file, the user can copy material from an auxiliary input file or write material to an auxiliary output file. KED assists in the preparation of source programs by allowing the user to edit files through a full-screen, bidirectional scrolled "window" into the file. In addition to the standard character, word, and line operations, KED provides flexible search, replace, cut, paste, and repeat functions.

SOURCE CODE INFORMATION:

Source code for the Form Driver is provided on all available distribution media for this product.

This source code is provided on an "AS IS" basis without any warranty of any kind either express or implied.

MINIMUM HARDWARE REQUIRED:

For Application Execution

The Form Driver requires from 6K to 9K bytes of main memory, depending on the options selected when the Form Driver is generated. An additional 1K bytes is required for interface code if the Form Driver is called from any high-level language.

Terminal	Form Development	Application Execution
VT52	N	Y
VT100	Y	Y
VT100 with AVO	Y	Y
VT101	Y	Y
VT102	Y	Y
VT125	Y	Y

Key: Y = Fully Supported

N = Not Supported

AVO = Advanced Video Option

For Application Development

The Form Editor requires 36K bytes and one of the terminals listed above.

The Form Utility requires 16K bytes. It does not require a VT100 terminal.

For KED

Any valid RSX-11M or RSX-11M-PLUS system capable of supporting the full-duplex terminal driver with a VT52 or VT100 for each operator using KED. KED requires 30K bytes of memory.

PREREQUISITE SOFTWARE:

One of the following:

For Application Execution

RSX-11M Operating System*
RSX-11M-PLUS Operating System*
RSX-11S Operating System, Version 4.0

For Application Development

RSX-11M Operating System*
RSX-11M-PLUS Operating System*

NOTE: FMS-11/RSX application programs must be developed using MACRO-11 (which is included in the prerequisite operating systems) or one of the higher level languages listed in the Optional Software sections.

FMS-11/RSX requires that the operating system be generated with the full-duplex terminal driver, which requires memory management hardware. Execution of the Form Utility (FUT) in a multitask environment requires that checkpointing to a system file be enabled

* Refer to the RSX-11M or RSX-11M-PLUS Optional Software Cross Reference Table (20.98.xx or 20.99.xx) for the required version.

OPTIONAL SOFTWARE:

BASIC-PLUS-2 for RSX-11M and RSX-11M-PLUS
COBOL-81/RSX
FORTRAN IV/IAS-RSX
FORTRAN 77/RSX
PDP-11 COBOL

TRAINING CREDITS:

None

SOFTWARE INSTALLATION:**CUSTOMER INSTALLED**

FMS-11/RSX is a software product engineered to be installed by the customer.

SUPPORT CATEGORY:**DIGITAL SUPPORTED**

During the ninety (90) day period either from the date of first use by the customer or thirty (30) days after delivery (F.O.B. DIGITAL's plants), whichever occurs first, DIGITAL will provide the following standard services if the customer encounters a problem with the Software Product:

- (a) If DIGITAL also determines the problem to be a defect in the Software Product, DIGITAL will provide remedial service on site if necessary (1) to apply a temporary correction or make a reasonable attempt to develop an emergency bypass if the software is inoperable, and (2) assist the customer in preparing a Software Performance Report (SPR).
- (b) If customer diagnosis indicates the problem is caused by a defect in the Software Product, it may submit an SPR to DIGITAL. DIGITAL will respond to problems reported in SPRs that are caused by defects in the current, unaltered release of the Software Product via a Newsletter. This Newsletter provides code corrections, temporary corrections, generally useful emergency bypasses and/or notice of the availability of corrected code.

Telephone support is available, at no additional charge, from the DIGITAL Telephone Support Center for a ninety (90) day period commencing either from the date of first use of this Software Product by the customer or thirty (30) days after delivery, whichever comes first.

Any Updates to the Software Product released by DIGITAL during this ninety (90) day period will be provided to the customer on DIGITAL standard distribution media as specified in this SPD.

These services will be provided in locations within the United States, except Alaska. Otherwise, service will be provided in the country of purchase. Service required because of customer use of other than the current, unaltered release of the Software Product operated in accordance with the SPD will be provided at DIGITAL's then current rates, terms and conditions.

ORDERING INFORMATION:

All binary licensed software, including any subsequent updates, is furnished under the licensing provisions of DIGITAL's Standard Terms and Conditions of Sale, which provide in part that the software and any part thereof may be used on only the single CPU on which the software is first installed, and may be copied, in whole or in part (with the proper inclusion of the copyright notice and any proprietary notices on the software) only for use on such CPU.

All source licensed software is furnished only under the terms and conditions of a separate Software Program Sources License Agreement between Purchaser and DIGITAL.

Options with no support services are only available after the purchase of one supported license.

A single-use, license-only option is a license to copy the software previously obtained under license.

The following key (D, E, H, M, Q, T, V, Z) represents the distribution media for the product and must be specified at the end of the order number, e.g., QJ715-AD = binaries on 9-track 800 BPI Magtape (NRZI).

D = 9-track 800 BPI Magtape (NRZI)
 E = RK05 Disk Cartridge
 H = RL02 Disk Cartridge
 M = 9-track 1600 BPI Magtape (PE)
 Q = RL01 Disk Cartridge
 T = RK06 Disk Cartridge
 V = RK07 Disk Cartridge
 Z = No hardware dependency

QJ715 -A— Single-use license for FMS-11 components and KED, binaries, documentation, support services (media: D, E, H, M, Q, T, V)

QJ715 -D— Single-use, license-only option for FMS-11 components and KED, no binaries, no documentation, no support services (media: Z)

Special License Option

When the Form Driver and KED are the only portions or components of FMS-11/RSX to be run on a given CPU, the Purchaser can obtain a license for the FMS-11/RSX Form Driver and KED only. If any other component of FMS-11/RSX is to be used, the Purchaser must obtain the FMS-11/RSX license.

QJ717 -D— Single-use, license-only option for Form Driver and KED, no binaries, no documentation, no support services (media: Z)

Sources/Listings Option

QJ715 -E— Sources license for FMS-11 components, sources, no documentation, no support services (KED sources not included) (media: D)

Supplementary Software Update

The following option is available as an add-on to an existing RSX-11M or RSX-11M-PLUS single-use license. The add-on allows RSX-11M or RSX-11M-PLUS users to add KED to their systems.

QJ715 -T— Single-use license, binaries, documentation (media: D, E, H, M, Q, T, V)

Update/Unsupported Options

Users of FMS-11/RSX whose specified Support Category warranty has expired may order under license the following software option as an update to an earlier version. The option may also be purchased for use on a second or subsequent CPU, in conjunction with a single-use, license-only option. Options are distributed

in binary form on the appropriate medium and include no installation or other services unless specifically stated.

QJ715 -H— Binaries for FMS-11 components and KED, documentation (media: D, E, H, M, Q, T, V)

QJ715 -H— Right-to-copy for single-use for FMS-11 components and KED, no binaries, no documentation (media: Z)

QJ717 -H— Right-to-copy for single-use for Form Driver and KED, no binaries, no documentation (media: Z)

Sources/Listings Update Options

The following options are available to licensed users as updates to sources and/or listings options. The update is distributed in source form on the appropriate medium and includes no installation or other services unless specifically stated.

QJ715 -N— Sources, documentation (media: D)

Miscellaneous Options

QJ715 -G— Documentation-only kit (media: Z)

ADDITIONAL SERVICES:

The following post-warranty Software Product Services for this software product are available to licensed customers:

- Self-Maintenance Service
- Basic Service
- DECsupport Service

The prerequisite being the purchase of the equivalent level RSX-11M, RSX-11M-PLUS, or RSX-11S Software Product Service. Customers should contact their local DIGITAL office for additional information on the availability of these services.